11 || EASE Applications

It is possible to execute special EASE application programs from the EASE desktop, in addition to the Designer Plus program.

In alphabetical order, the programs are:

Calcform	A spreadsheet program which enables you keep track of numerical and financial data, and produce printed output in the form you require.
Charts	A business graphics program which enables you to produce graphical output in a variety of styles to suit your requirements.
Database	An extremely flexible database program which enables you to store information in an accessible form, with a choice of output formats.
Printer	This program is used to control the form of printed output from the word processor application program Word-pro.
Word-pro	This is the combined word processor and page maker program, and with this program you can produce a display on the printer in exactly the same form as you see on the screen. In Word-pro documents you can mix text in a range of type styles with graphics output from Charts. In addition, it is possible to introduce data from the Calcform and Database programs.

Executing applications

All these applications are visible in the directory windows (either with All files or Executable programs displayed). The names of the files are directly related to the name of the application:

- CALCFORM.PGM
- CHARTS.PGM
- DATABASE.PGM
- PRINTER.PGM

- WORD-PRO.PGM

To execute an application either you double click on the appropriate file name in the directory window, or you select the file name and Run using the Actions menu.

If you double click on the selected file then you are asked to confirm your action (if the "Confirm" option is set for the Controls option on the Options menu. If, however, you decide to Run the application, then you are asked to provide a parameter list -- there are no parameters, so click in the "OK" box.

There are two names (Desk and Files) which appear in the menu bar for all applications, and in the next chapter we will examine these two names.

12 || The Desk and Files functions

There are two names common to all EASE applications, Desk and Files. The Desk options do not involve any new ideas, but the Files options involve ideas not in the EASE desktop system.

DESK

There are three principal sections in the Desk menu:

Version This is identical to the Version option for the desktop name Desk.

Desk functions This section contains the equivalent of the Controls function in the desktop Options menu, plus the Calculator and Notebook options from the desktop Desk.

The operation of each of those options is identical to those in the desktop and, for example, it is possible to leave reminders in the Notebook which can be consulted in any EASE application plus the desktop.

Applications The names in this section depend on the application. One name is always EASE, and the remaining names are the EASE applications not in use. If you select any of the names in this section then you exit the present application, to return to EASE or to execute a new application.

For instructions on how to use the desktop functions see the relevant descriptions earlier in this manual.

FILES

When you activate this option name in any application, you are presented with a menu in two sections:

- File functions; and
- Spooler manipulation.

The file functions are shown in dark characters if the function is active, and in light if the function is not appropriate. If any of the functions are activated, and there are data present which might be corrupted or overwritten, you are asked whether the data are to be saved.

The selection of options within any of the **Files** functions is common to all functions, except **Save file**. Apart from the **Save file** function, you select your option by sending messages to a standard form of window (described below, after the functions).

Each application has files specific to that application, and the files are distinguished by the form of the file extension (for example, database files have the extension .DBD). Normally, the selection of files is restricted to files with the relevant extension and, in general, there is a standard default file name for each application (for example, TEMP.DOC for the word processor).

Though the exact meaning of **Load file**, say, will vary with the application, the file function messages are:

Load file "Load the file selected with the **Load file** window".

Save file "Save the current information in a file with the present name".

Merge file "Merge the file selected by use of the **Merge file** window". There will be further messages to send, depending upon the application.

Disk functions "Provide facilities for file manipulation using the **Disk functions** window, without involving the file in input or output functions".

It is possible to send information to the printer via what is known as a 'Spooler'. With the spooler, files for printing are placed in a queue. Printing of the information in the queue takes place at the same time as you are using other EASE facilities -- when the computer has nothing to do.

Spooling means there is no need to wait for printing to finish before you start on your next task. When you are using a computer, most of the time the computer has no work to do -- consider how much time you spend thinking at the keyboard, without typing.

There are two spooler functions:

Send file to Spooler
"Send the file chosen by the **Select file** window to the spooler queue". Many EASE applications allow you

to send your output to a special Spooler file (with the extension .SPL), so that you can then put the file in the queue by use of this option. Individual details will be given for each application.

Spooler information

"Provide information on the status of the spooler queue". The information provided (see Figure 12-1) gives the actual file being printed, and the names of any files waiting in the queue.

FIGURE 12-1 HERE

FILE FUNCTIONS WINDOW

FIGURE 12-2 HERE

The form of the file functions window is as shown in Figure 12-2, for the particular case of the Send file to Spooler function. There are several distinct areas in the window.

- A heading which is, in this case, "Select files".
- A "Search" field which, in this case, is a directive to search for all files with the extension .SPL on disk A: (that is, A:*.SPL).
- A "Select" field, and, in this case, the default file TEMP.SPL is ready for selection. It is possible to click in this field, and enter a file name directly, or a file can be selected by clicking one of the files hsown in the directory window.
- A directory window which displays files for which a Dir search has been made. At the side of the window is a bar, and two arrows. The bar and arrows are used to examine the directory displayed in the window. The use of the bar and arrows is similar to that of the main directory windows in of the EASE desktop, though the display is always By text and not By icon.
- A series of options related to file manipulation:

FIGURE 12-3 HERE

  * Dir : "Show a list of files in the directory window, where the files are as described by the Search field". In Figure 12-3 the directory window shows two files, FILE0.SPL and FILE1.SPL, produced as a result of the injunction to Dir with the search field A:*.SPL. The selected file is still TEMP.SPL, even though there is no file of that name in the directory.

FIGURE 12-4 HERE

* **Rename** : "Give the selected file a new name". If a file is selected from the directory by clicking, the file is shown in reverse video, and the name is shown in the selected file field. In Figure 12-4 the selected file is FILEO.SPL, and if you click in the "Rename" box a Rename file window appears, requesting the new name. If you wish, you can "Cancel"; otherwise you enter the new name in the "New name" field (by pointing and clicking), and then click in the "OK" box.

* **Delete** : "Delete the selected file". To click in this box, produces a confirmation window, and if you have made a mistake you can click in "Cancel".

* **Copy** : "Copy the selected file to a new disk, keeping the same name". The file A:FILEO.SPL will be copied to B:FILEO.SPL, unless you "Cancel".

* **OK** : "Finish with this files window, and execute the relevant function with the selected file". For example, under **Load file** you can manipulate files (changing names and so forth), select a file, and then load the selected file by clicking in the "OK" box.

* **Cancel** : "Finish with this files window, but do not execute the relevant function". That is, manipulate files, and exit without executing any of the file functions.

As was stated above, the meanings of the **Files** functions will vary slightly depending upon on the EASE application, and in the case of the **Database** there is a **Save definition** window of the above format.

Apart from saving a definition in the **database** program, the **Save file** window has a "STOP" symbol, and provides three boxes:

- "Save and continue",
- "Save and close", and
- "Cancel option".

If you attempt to exit an application without saving you are shown a window with a "STOP" symbol, and three boxes:

- "Exit saving file",
- "Exit without save", and

- "Cancel option".

The next chapters will discuss each of the EASE applications, based on the probable frequency of use of the application, so the word processor is first:

Chapter 13	WORD-PRO
Chapter 14	GRAPHS
Chapter 15	PRINTER
Chapter 16	CALCFORM
Chapter 17	DATABASE

17 || DATABASE

You execute the database program by selecting the DATABASE.PGM file from the EASE desktop directory, and clicking twice.

Information for one individual case is called a 'record', and each record contains one or more 'fields', each with a specific type of information. For example: if you are cataloguing your library of books, each book will comprise one record; and the title, the author, and the date, will each comprise a field of the record.

There are three distinct aspects to producing and using a database:

- The design of the record, and its constituent fields ("Create" a record definition);
- The entry of information according to the format as set by the design of records ("Insert" information); and
- The display of information stored in the database you have created (Output "Reports").

We will examine the use of the database program under the above three headings. When you start the database application, you are in the "Insert" mode, and to produce a new database you click in the "Create" box -- we start with "Create".

"CREATE" A RECORD DEFINITION

FIGURE 17-1 HERE

The menu bar has three names:

Desk This is the standard object for applications, and you can execute EASE, CALCFORM, CHARTS, PRINTER, and WORD-PRO from this application.

Files The "Save file" and "Merge file" options are not available, because there is no definition to save (as yet), and it is not possible to merge definition files.

Definition files have the standard extension .DEF. If "Load file" is selected, a standard disk files window appears -- with the default search being A:*.DEF and

the file selected being DEFAULT.DEF.

The disk functions and spooler options, have their normal meaning.

Utilities

This menu has options to control the placement of fields,

- Delete field
- Copy field
- Move field

with CTRL key equivalents. Only one of the three options can be operative at any time. The active option is ticked. Related to these three options is

- Insert title

which allows you to enter standard text in the definition -- that is, the text is repeated for each record, and cannot be erased.

There are two other options

- General information: what is the status of the record as defined so far?.
- Delete definition: not to be confused with delete record, this option deletes the complete definition.

The first step in creating a record form for a database is to decide what information will required for each instance.

Suppose we are creating a database which will contain names and addresses for companies. The main items will be:

- Company name
- Company address
- Company telephone
- Contact person and ext

In addition, there might be an extra category of information:

- Comments

which can contain extra information about the company.

We have, therefore, five names to give to fields, or five "titles" as they are known in the database. In the definition of the record form, we will create five fields to hold these titles, and another five regions to hold information corresponding to the titles. Four of the five regions will contain only one field, but the address will be formed from five fields, one field for each line of the address.

FIGURE 17-1 HERE

To create a field, you make a rectangular box by positioning the pointer at the top left hand corner of the box, holding down the button, and creating a box by positioning the bottom right corner with the pointer. After creating a field box, and clicking, you can then hold down the button and to make a copy of the box in a different position, this is the way all the information fields (on the right) were replicated.

The title fields will be placed for this database on the left, and the information fields will be to the right -- see Figure 17-1.

FIGURE 17-2 HERE

Place the pointer in a title field, and click. If you click the Utilities name, and then choose the Insert title option, the box for the selected field is disappears, and you can enter text. If your title does not fill the field, you signal the end of the title by RETURN, and the remainder of the field appears -- see Figure 17-2.

To click in the "Company" field, and then select Utilities and General information, gives following information:

N# of fields	14
Record length	413
Active field	
Field length	5
Title length	7

The total length of the field selected is 12 characters: 7 characters are used by the title "Company", which leaves 5 characters which could be inserted for each record. To have these 5 characters available as

a field can cause confusion so, therefore, we normally fill the full extent of the title field by adding extra spaces.

FIGURE 17-2 HERE

Figure 17-2 shows the same style of definition as before, but with all the excess field being filled with spaces. To enter the title "Company" (for example), you type "Company" and continue to hit the space bar, and when the field is full, the cursor rectangle disappears.

FIGURE 17-3 HERE

At the side of the description window is a bar, with a rectangle which gives an indication of the space left for a record definition. If, say, you wanted a longer field for comments, you can move the rectangle down the bar, and change the size of the "Comments" field, as shown in Figure 17-3. You select the last field, by clicking in the field, and then use the **Delete field** option of the **Utilities** name (or hit CTRL B) to remove the field. You create a field in the usual way.

To save the definition, you use the **Save files** option of the **Files**, and a "Save definition" files window appears. The default extension for definition files is .DEF, and you choose the name you wish to give the database. For example, the database we will construct will be known as EASEBASE and so the file is EASEBASE.DEF.

FIGURE 17-4 HERE

If you want more than one database with the same form of record, you can save the same definition many times, with different names. The files DEF0.DEF, DEF1.DEF, and EASEBASE.DEF (see Figure 17-4) have the same definition.

"INSERT" DATABASE INFORMATION

To enter information into a database, you click in the **Insert** box, and if you have just created a definition, that is the name of the file given in the second row (under the menu bar).

If you are going to use an existing database you click the **Files** name, and use the **Load file** option. Any database files has the default extension .DBD, with the same main name as the definition file. When you save a definition file, you automatically save a database file (which contains no information). For every .DEF file, therefore,

there is a corresponding .DBD file.

The are two new names in the menu bar:

Options

To start entering new information in a database, that is, to

- Enter new records

you either click this option, or you hit CTRL A. A Outlined rectangle appears surrounding the first active field (in our case, the company name field).

You enter information using the RETURN to signal the end of a field, and you do not use the RETURN to end a line -- you move within a field by use of the cursor keys. In addition, it is possible to switch between field by use of the cursor keys. When you hit RETURN after the last field in a record, you move to a new record.

It is possible to reorder the records in a file according to alphabetical order according to information in specified fields. You

- Sort file

and a window appears asking for the fields by which you wish to sort. The easiest way to select a field is to click in the appropriate field.

For example, to sort by company name, you click in the field which conatins the company name. It is possible to sort by more than one field. When sorting a large file, it is possible that the actual sorting will take a long time.

At times, it is possible that you many wish to enter information

- By default values

and this option allows you to establish default values for records (using default values can save a good deal of typing). When you are entering information in a new record (and there is a default value), then if you hit RETURN without entering information in a particular field, the defualt value appears.

If you want to

- Modify actual record

you search for the approriate record, and activate this option.

With the

- Search record

it is possible to search for the first record beginning with a specified set of characters in the first field. When you activate this option, you are given a specimen field which you can ask the database to match.

Sometimes you want to

- Delete actual record

and you delete the active record (that is, the one currently on screen).

See The options for this name are self-explanatory:

- See the next (CTRL X)
- See the previous (CTRL Z)
- See the last (CTRL U)
- See the first (CTRL P)
- See by default values (CTRL V)

and each option has a CTRL key equivalent.

MAKE "REPORTS"

There are six names in the menu bar for the Reports environment. **Desk** and **Files** have their normal meaning, and I will examine the other four names in the logical order of use.

Outputs You can output information in one of three ways (mutually exclusive):

- By screen
- By printer

- By disc

The default is normally By screen.

Disc

If you have chosen to output to disk, you can send the output to an

- ASCII (character) file
- Spooler file
- Merge file

The output to an ASCII file means that the report can be used by programs other than EASE. The spooler and merge files are special files for use by EASE.

Printer

You can set the

- Report title

by clicking in this option, and choose the form of printed output (Expanded, Italics, Underline, and/or Bold). You can choose

- Settings

for the rest of the report, which include type of paper, format for output (Listings, Labels, Records), format of the the typeface, and -- if printing labels -- the number of lines per label. It is best to experiment with this option.

Options

You can

- Execute report

dependent upon the criteria set by

- Selection criteria

which allows you to select records which contain specified information in specified fields. You may not wish to print out the titles and thus you choose the

- Field of report

by this option. The fields selected for the address database are shown in Figure 17-5, and the fields were chosen by clicking in the approriate field --

note that the select fields window was moved to assist selection.